



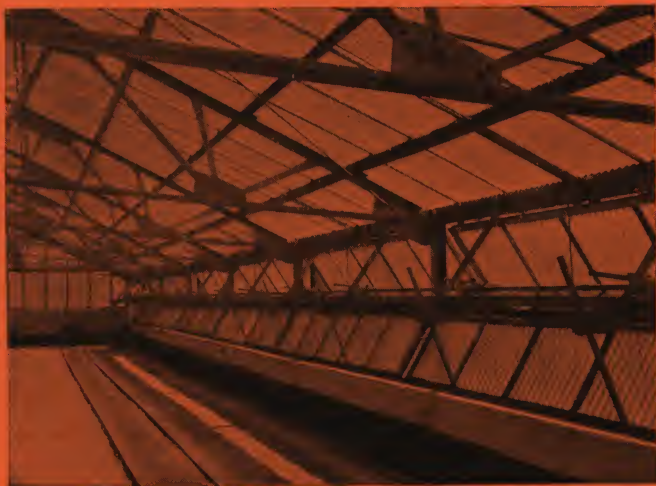
PHILADELPHIA NAVY YARD  
FOUNDRY BUILDING  
21,000 sq. ft. Side Wall Construction



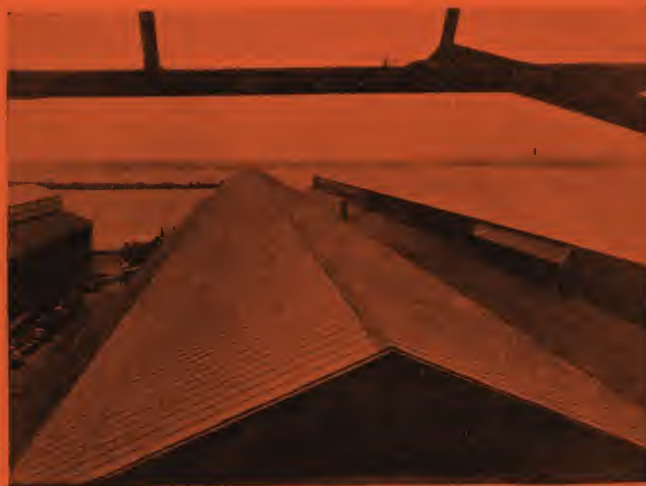
PERFECT CIRCLE PISTON RING CO.  
HAGERSTOWN, INDIANA  
7,500 sq. ft. C. W. G. Sawtooth Construction

# CORRUGATED WIRE GLASS

## SKYLIGHTS AND SIDE WALL CONSTRUCTION



SLUDGE BEDS  
BURLINGTON, N. J.  
All C. W. G. Buildings



GENERAL STEEL CASTINGS CO.  
EDDYSTONE, PA.  
323,000 sq. ft. Monitor Roofs

---

**PENNSYLVANIA WIRE GLASS COMPANY**  
1612 MARKET STREET  
PHILADELPHIA, PA.



# CORRUGATED WIRE GLASS SKYLIGHTS

Corrugated Wire Glass (CWG) is a corrugated sheet of glass with wire netting incorporated in it during the process of manufacture. Owing to the corrugations it has strength many times greater than any flat glass of equal thickness. To meet the demand for a strong, substantial skylight CWG was adopted to this use by the PENNSYLVANIA WIRE GLASS COMPANY which has specialized in this form of construction for many years.

CWG Skylights can be placed on a roof of any material, including corrugated iron and corrugated asbestos. CWG can be used for roofs, sidewalls, marquises, canopies and, in fact, wherever *daylight* is desired.

CWG Skylights offer many points of superiority. Low maintenance costs are an important item. There are no bars to rust or corrode. No supplementary frame is used as they are applied

directly on steel or wood purlins or curbs, and concrete. They have unusual resistance to vibration and temperature changes and are completely weathertight.

Because of the corrugations, rain washes off dirt and dust, making these skylights practically self-cleaning. Being translucent they transmit diffused light with a minimum of shadows.

The Company maintains an engineering service department for consultation regarding skylighting and kindred problems for which there is no charge. Upon receipt of rough sketches or details they will be glad to offer suggestions for CWG Skylights, roofs, etc. Samples of any type of glass manufactured will gladly be mailed on request. For data on Flat Wire Glass and Actinic Glass refer to catalog in the Glass Section of Sweet's File. See File Index.

## INDEX TO DETAILS

### Plate No.

- P-100 Isometric Detail of Typical Lap Joint.
- P-101 Gable End Skylights with Steel Framing.
- P-102 Single Pitch Skylights with Steel Framing.
- P-103 Concrete Curb Skylights.
- P-104 Concrete Curb Skylights.
- P-105 Skylights on Wood Sheathed Roof.
- P-106 Wood Curb Skylights.
- P-107 Skylights with Cement-tile Roofing.
- P-108 Skylights with Steel-deck Roofing.
- P-109 Sawtooth Skylights with Steel Framing.
- P-110 Sawtooth Skylights with Steel Framing.
- P-111 Sawtooth Skylights with Wood Framing.
- P-112 Skylights on Back Slopes of Sawtooth Framing.
- P-113 Skylights with Corrugated Sheet Metal Roofing.
- P-114 Steel Framed Marquise.

### Plate No.

- P-115 Typical Sheet Metal Ventilator Details.
- P-116 Methods of Draining Condensation.
- P-117 Steel Framed Canopies.
- \*P-118 to P-124 inclusive.
- 2700 Typical CWG Skylights with corrugated asbestos.
- 2700A Details of CWG with 2½ in. and 2¾ in. pitch corrugated asbestos.
- 2700B Details of CWG with 4.2 in. pitch corrugated asbestos.
- 2825A Standard 10 ft. 0 in. wide Curb Skylight—Steel Frame.
- 2825B Standard 20 ft. 0 in. wide Curb Skylight—Steel Frame.
- 2825C Standard 10 ft. 0 in. and 20 ft. 0 in. wide Skylight Gable-end Details.
- 3551 Details of CWG Ventilating Units.
- 3606 Sludge Bed Details.
- 3606A Sludge Bed Details.

\*These sheets will be sent out as they are issued.

## SPECIFICATIONS FOR THE INSTALLATION OF CORRUGATED WIRE GLASS

### SCOPE OF WORK

#### I. Work by Others—

All supporting frames, curbs, purlins, ridge-beams, tie-rods and bracing for proper construction shall be provided under another contract.

All roofing, curb and roof flashings, gutters and counter-flashings shall be provided under another contract.

#### II. Work Required—

The work to be done under this contract includes the furnishing of all labor, materials, equipment and services necessary for, and reasonably incidental to, the erection of (White or Actinic—specify which) Corrugated Wire Glass (in Skylights or Side-Wall Panels), as manufactured by the PENNSYLVANIA WIRE GLASS COMPANY with standard fittings of (specify which) No. 3S8 Aluminum (.032 in. thick), 18-oz. cold rolled copper, 24-gauge galvanized steel (copper bearing) (painted with aluminum), 13-gauge zinc, 24-gauge "Lead Clad" steel, 6-lb. Hoyt hard lead, as shown on the drawings and herein specified.

### SHOP DRAWINGS

This Contractor shall furnish the (Architects, Engineers, Purchasers), for their approval before any of the work is executed, complete shop drawings conforming to the recommendations of the manufacturer.

### CONSTRUCTION AND ERECTION

This Contractor shall erect the Corrugated Wire Glass exactly as prescribed in the approved drawings and recommendations of the PENNSYLVANIA WIRE GLASS COMPANY.

(While the specification clause above will cover the erection of Corrugated Wire Glass, under the heading of "Notes" below, there are several clauses which may be included where deemed necessary.)

### NOTES

(a) No sheet of Corrugated Wire Glass shall exceed 27¼ in. in width, and, no single sheet shall span more than 60 in. clear opening (up the slope) without an intermediate support. Where glass is set at an angle of 60 degrees, or more, from the horizontal, the maximum clear span may extend to 96 in. (up the slope). Corrugated Wire Glass covering openings greater than those mentioned must have an intermediate support or arrangements must be made to use two or more lights of glass.

(b) The sheets of glass shall be laid edge to edge (not lapping) with ½-in. spaces between the sheets and the open joints so formed shall be covered with exterior metal cover caps and metal inner strips which conform to the corrugations of the glass. The exterior cover caps shall have an asphaltic lining. The caps and inner strips, to complete the joint, shall be bolted together by bolts passing through the caps and inner strips and between the sheets of glass approximately 9 in. center to center.

(c) Where structural supports occur, clips, engaged by bolts passing through the cover caps, shall be used to hold the glass securely in place.

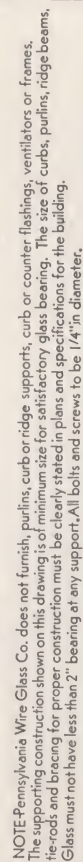
(d) Each light of glass shall have a firm, even bearing and wherever any sheet of glass is applied to structural work such as curbs, purlins, etc.), it shall be cushioned with an asphalt strip. Where it laps over other glass, it shall be cushioned with a sealing strip.

At the bottom (or eaves) of Corrugated Wire Glass construction and at the top (in conjunction with the ridge or flashings), the openings caused by the corrugations of the glass shall be filled with a sealing strip especially designed and supplied for this purpose.



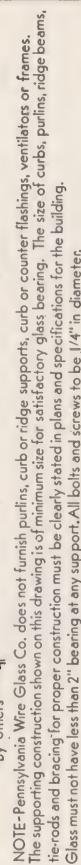






### DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS WITH GABLE ENDS AND STEEL FRAMING

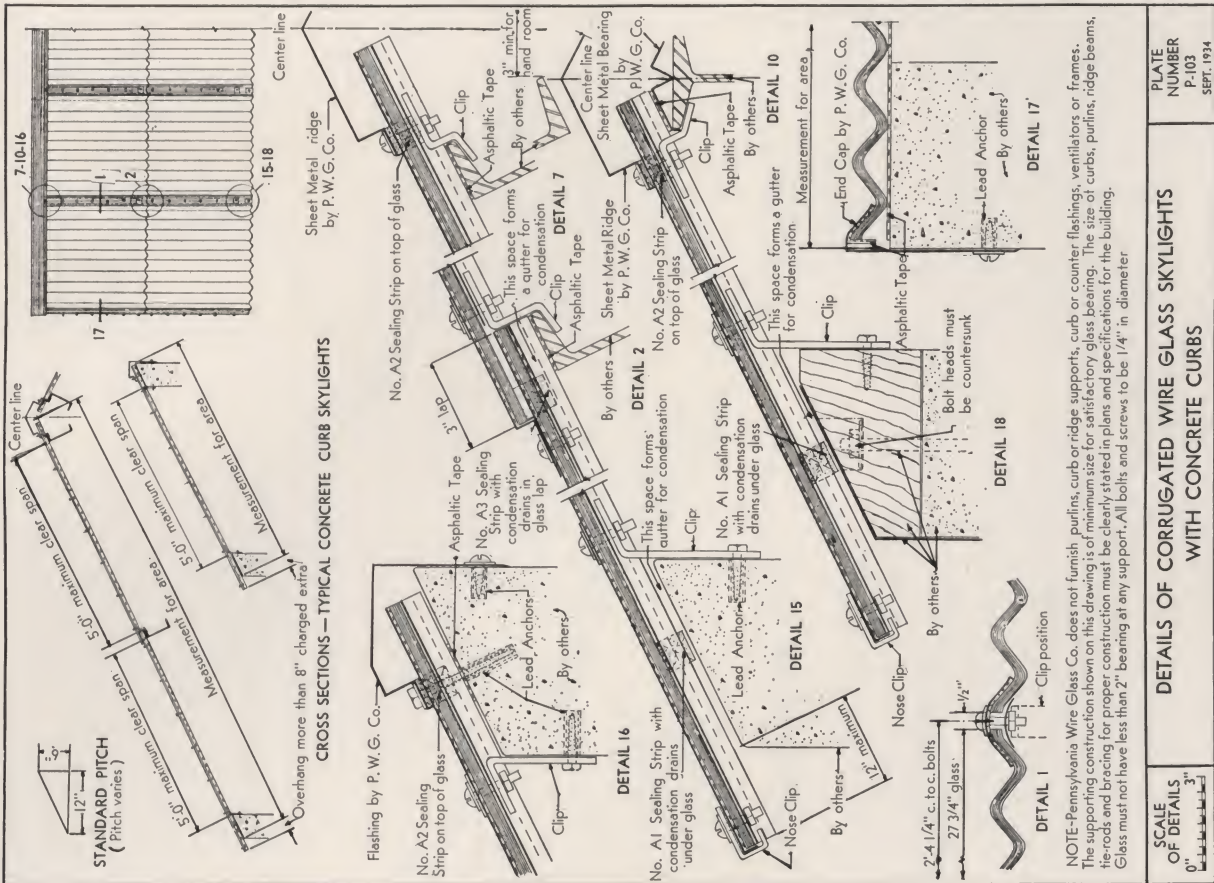
PLATE  
NUMBER  
P-101  
SEPT. 1934



DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS  
SINGLE PITCH — STEEL CURB FRAMING

PLATE  
NUMBER  
P-102  
SEPT. 1934

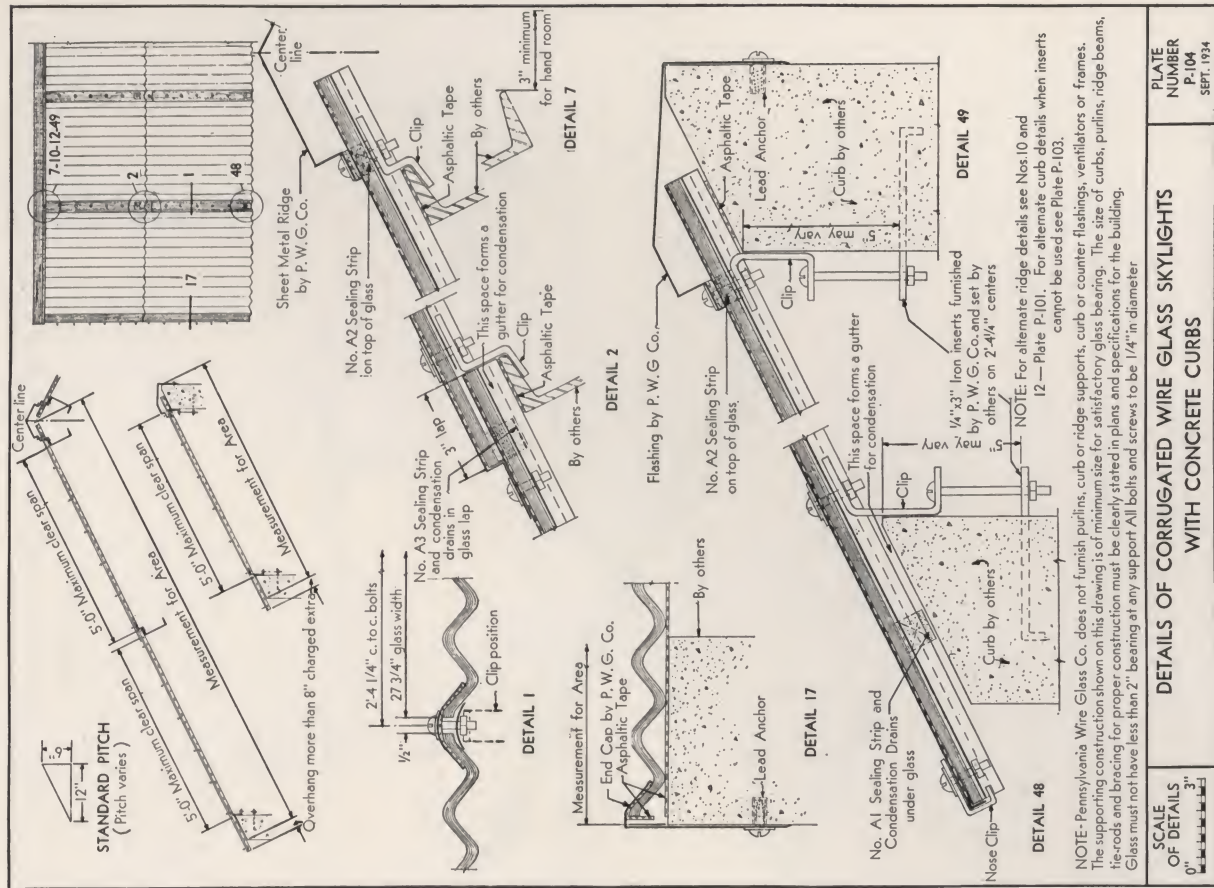




**DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS WITH CONCRETE CURBS**

SCALE OF DETAILS  
0" 3" 1"

PLATE NUMBER  
P-103  
SEPT. 1934

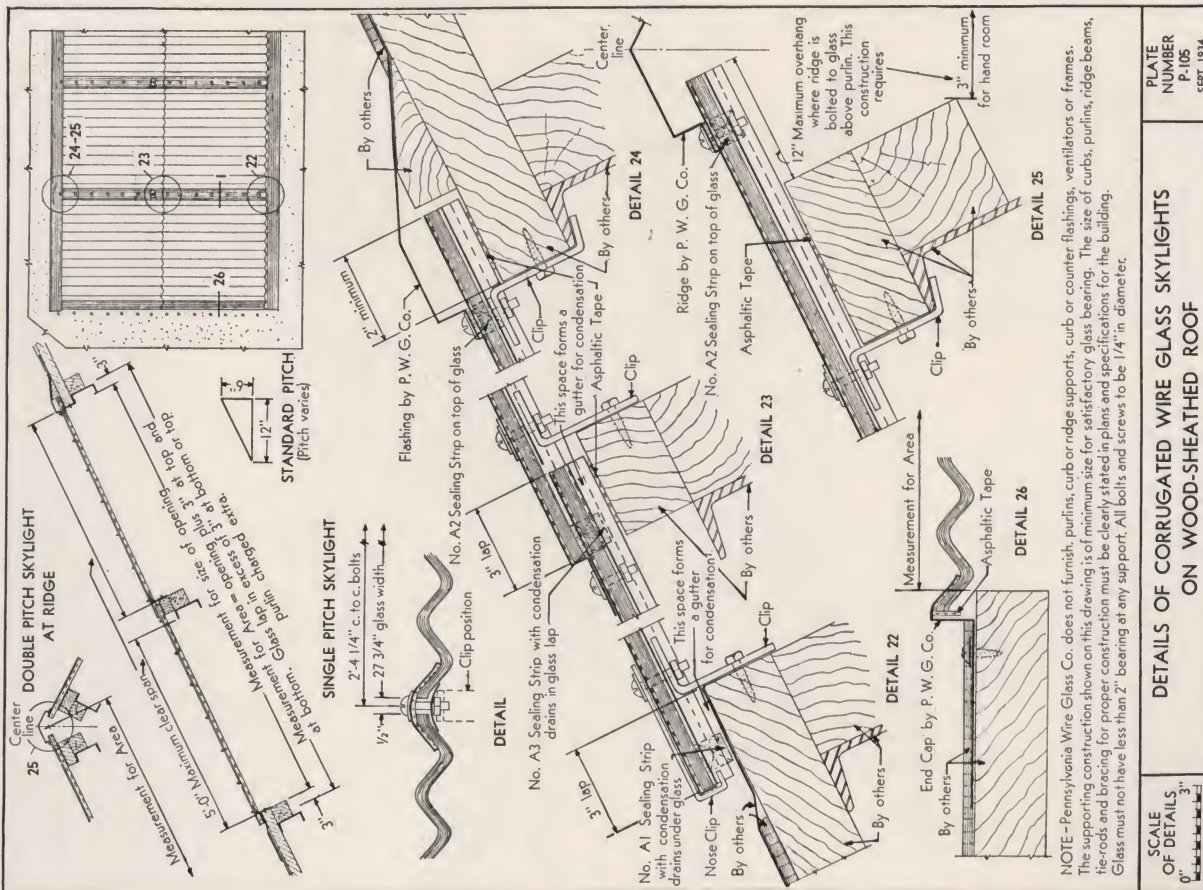


**DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS WITH CONCRETE CURBS**

SCALE OF DETAILS  
0" 3" 1"

PLATE NUMBER  
P-104  
SEPT. 1934

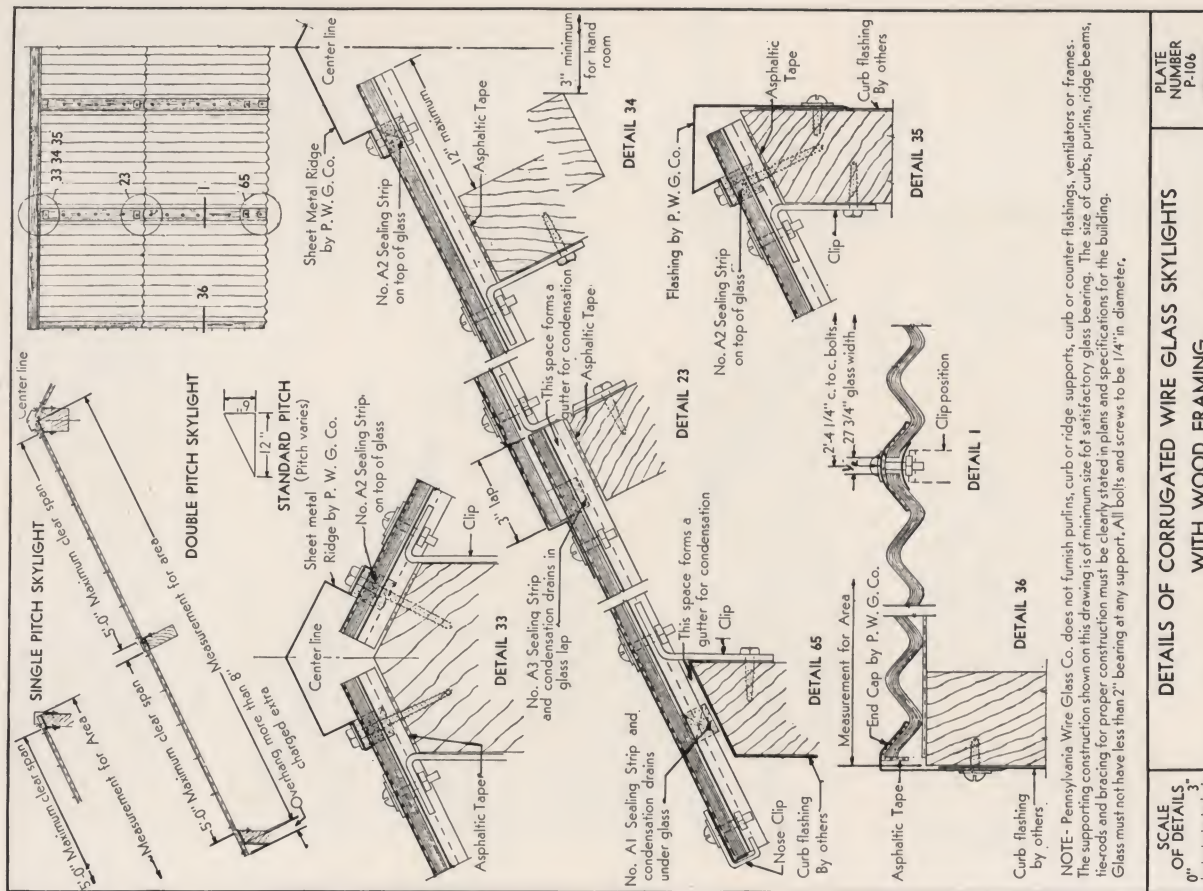




DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS  
ON WOOD-SHEATHED ROOF

SCALE  
OF DETAILS  
0" 3"

PLATE  
NUMBER  
P-105  
SEPT. 1934

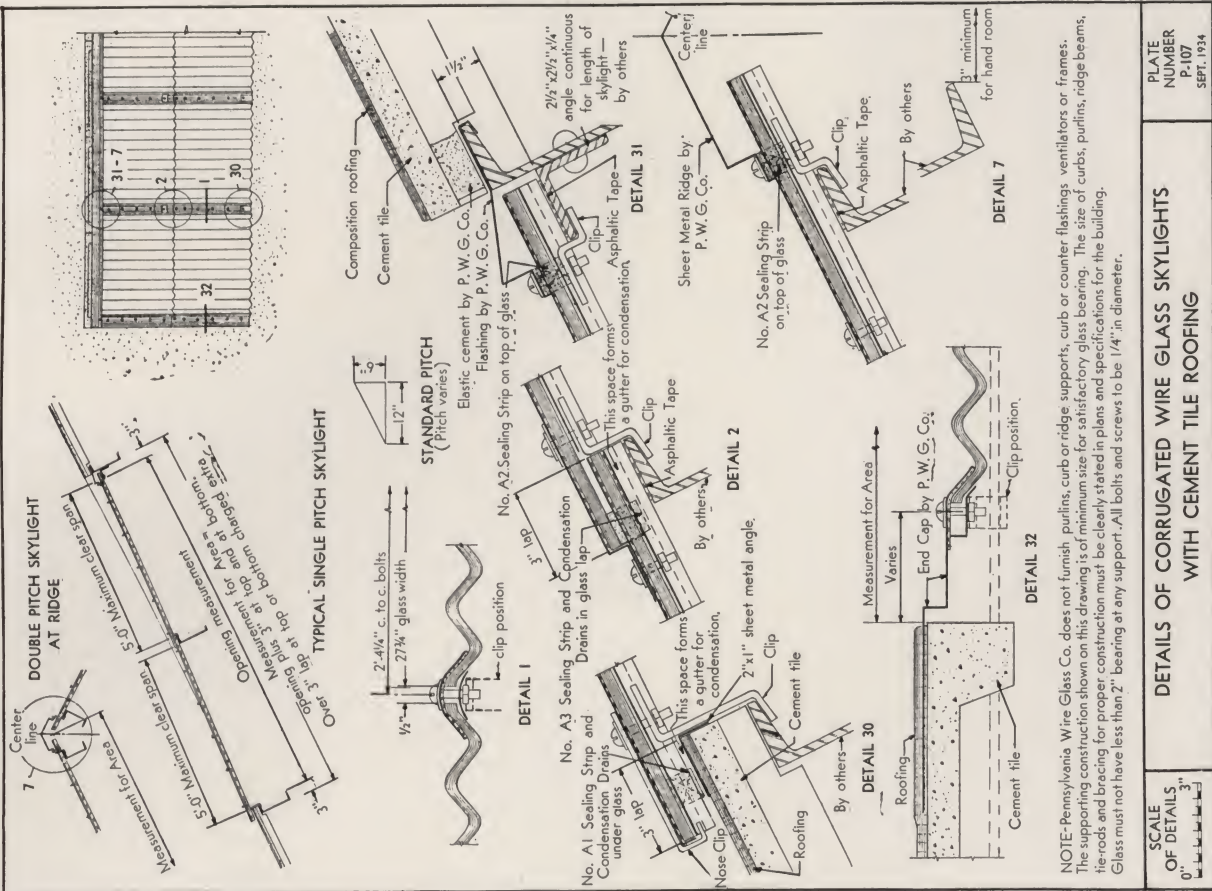


DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS  
WITH WOOD FRAMING

SCALE  
OF DETAILS  
0" 3"

PLATE  
NUMBER  
P-106  
SEPT. 1934

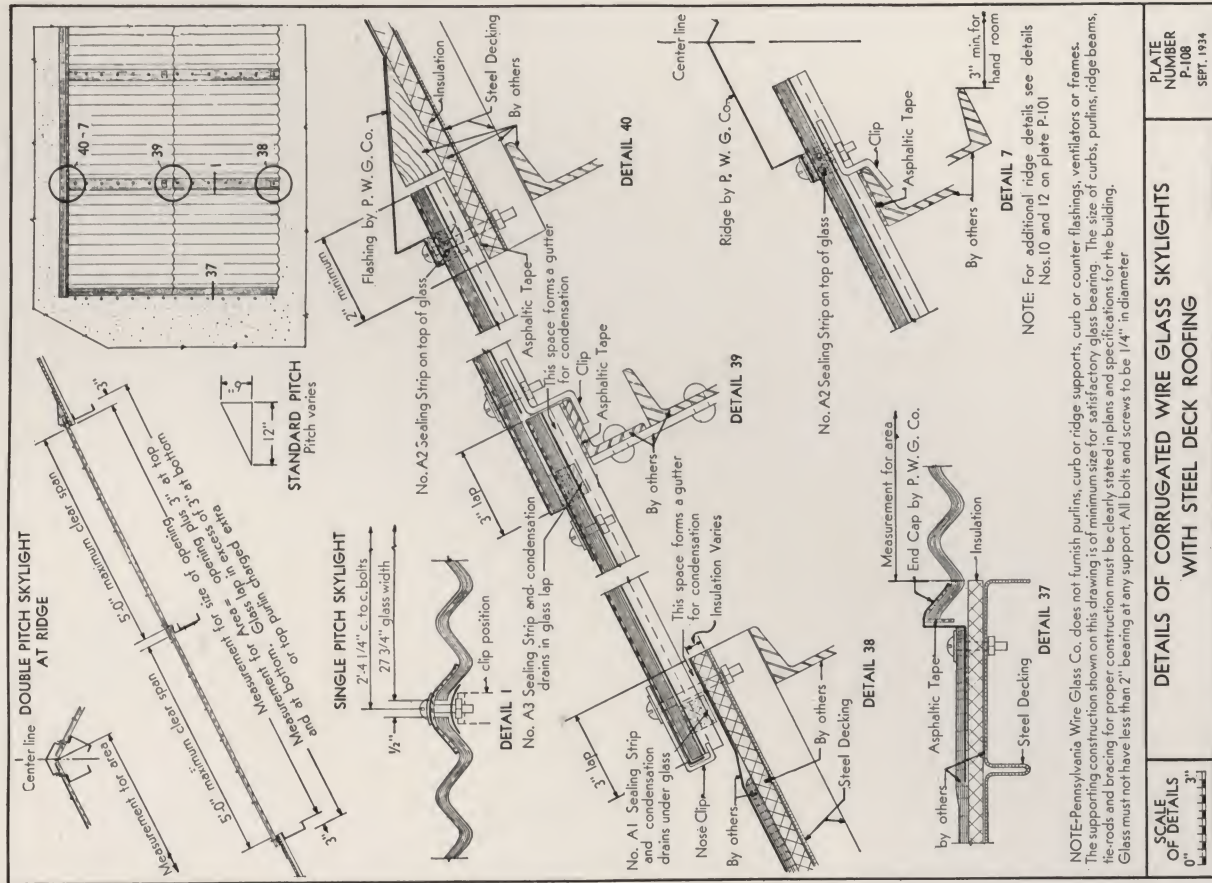




DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS  
WITH CEMENT TILE ROOFING

SCALE  
OF DETAILS  
0" 3"

PLATE  
NUMBER  
P-107  
SEPT. 1934

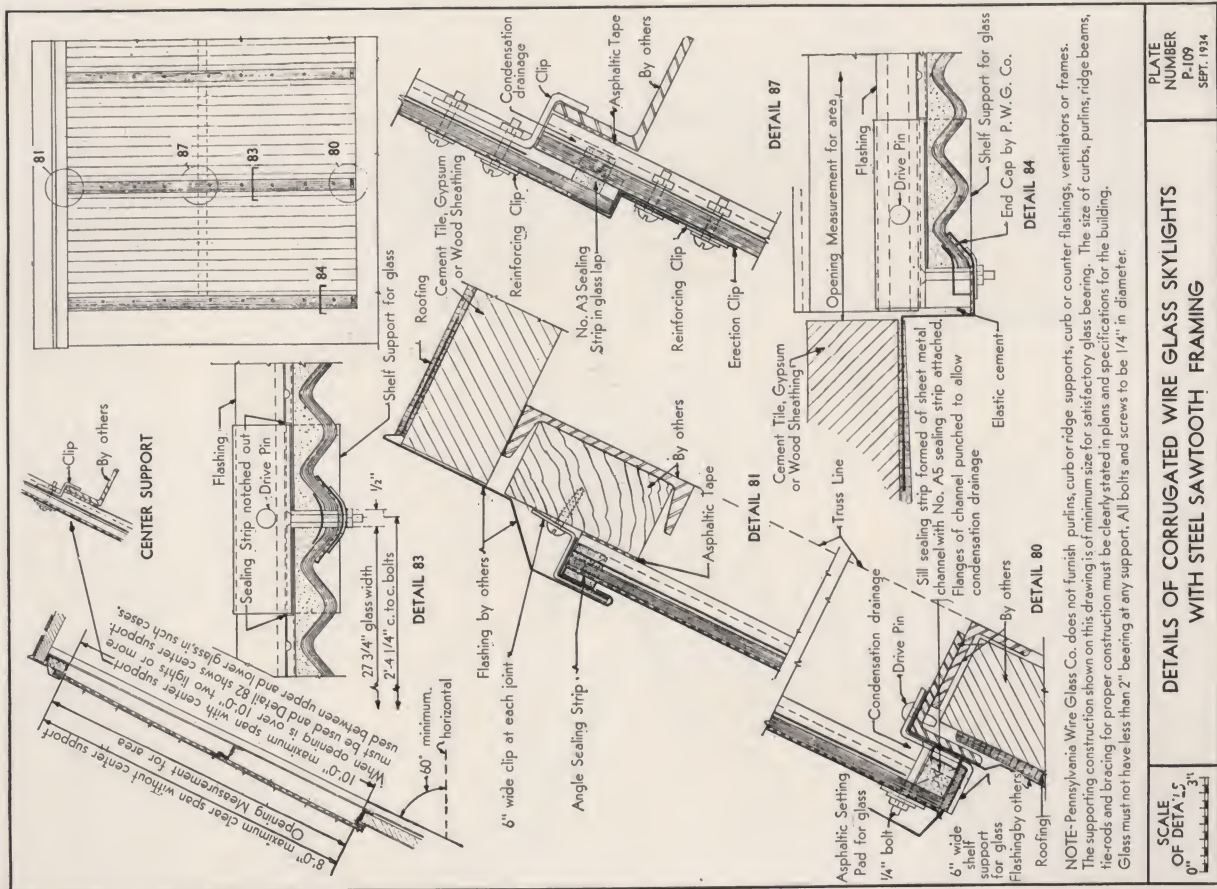
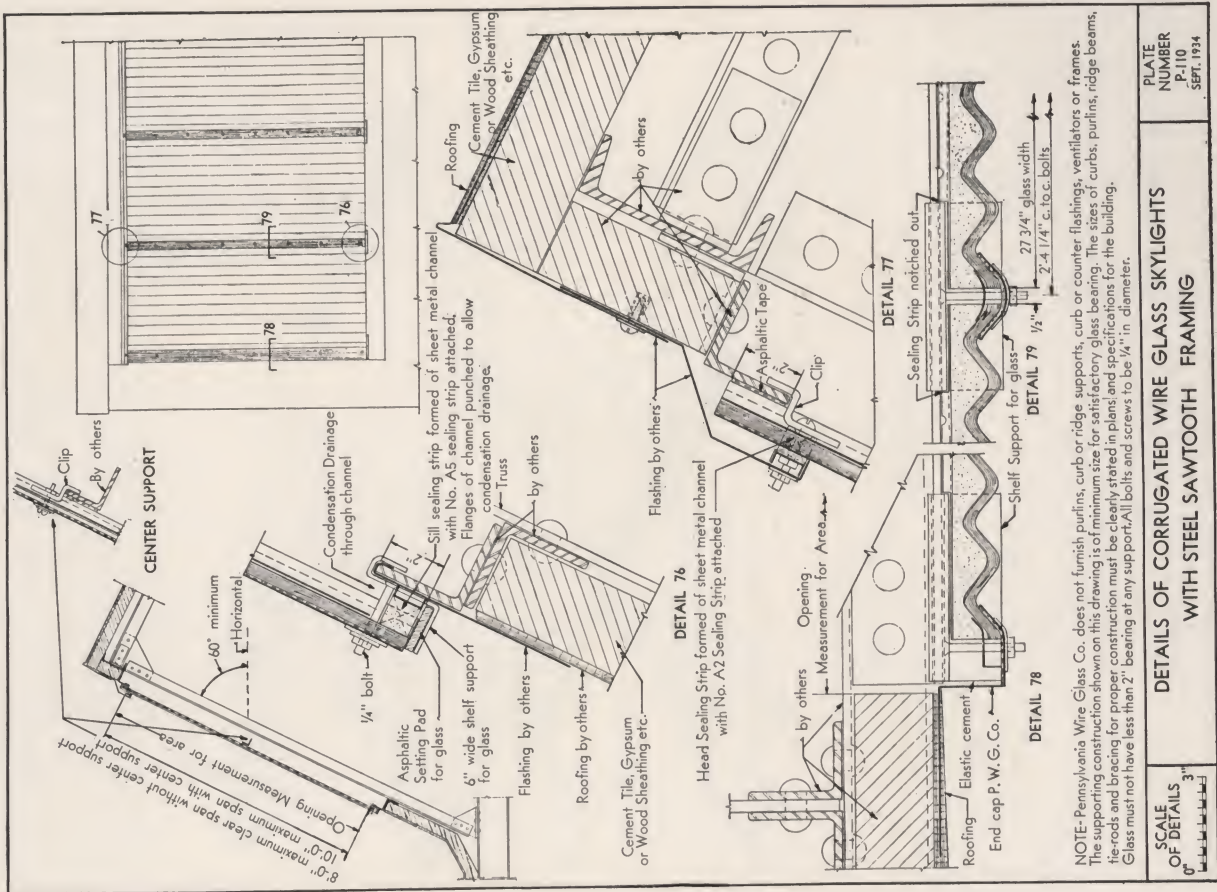


DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS  
WITH STEEL DECK ROOFING

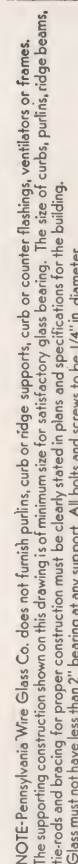
SCALE  
OF DETAILS  
0" 3"

PLATE  
NUMBER  
P-108  
SEPT. 1934

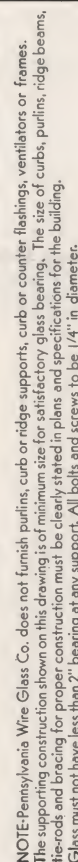






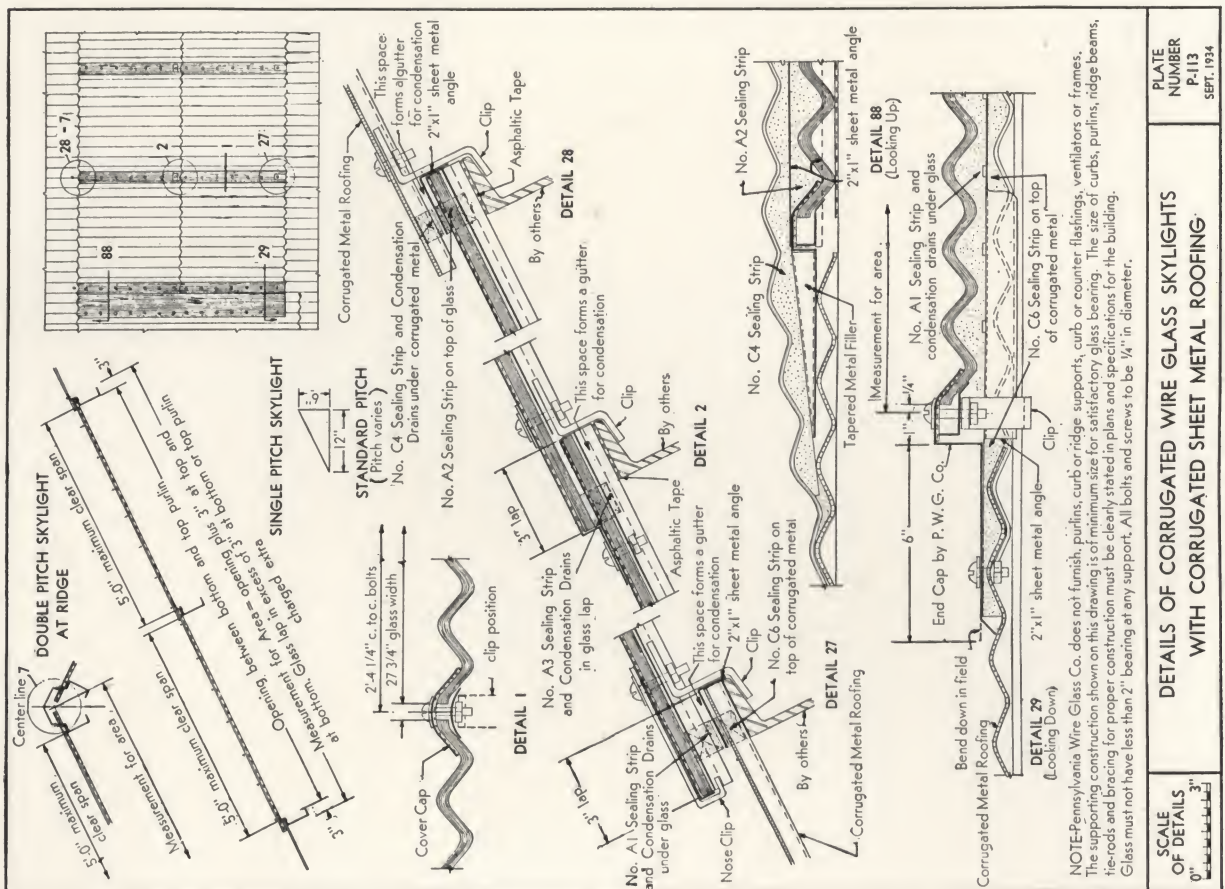
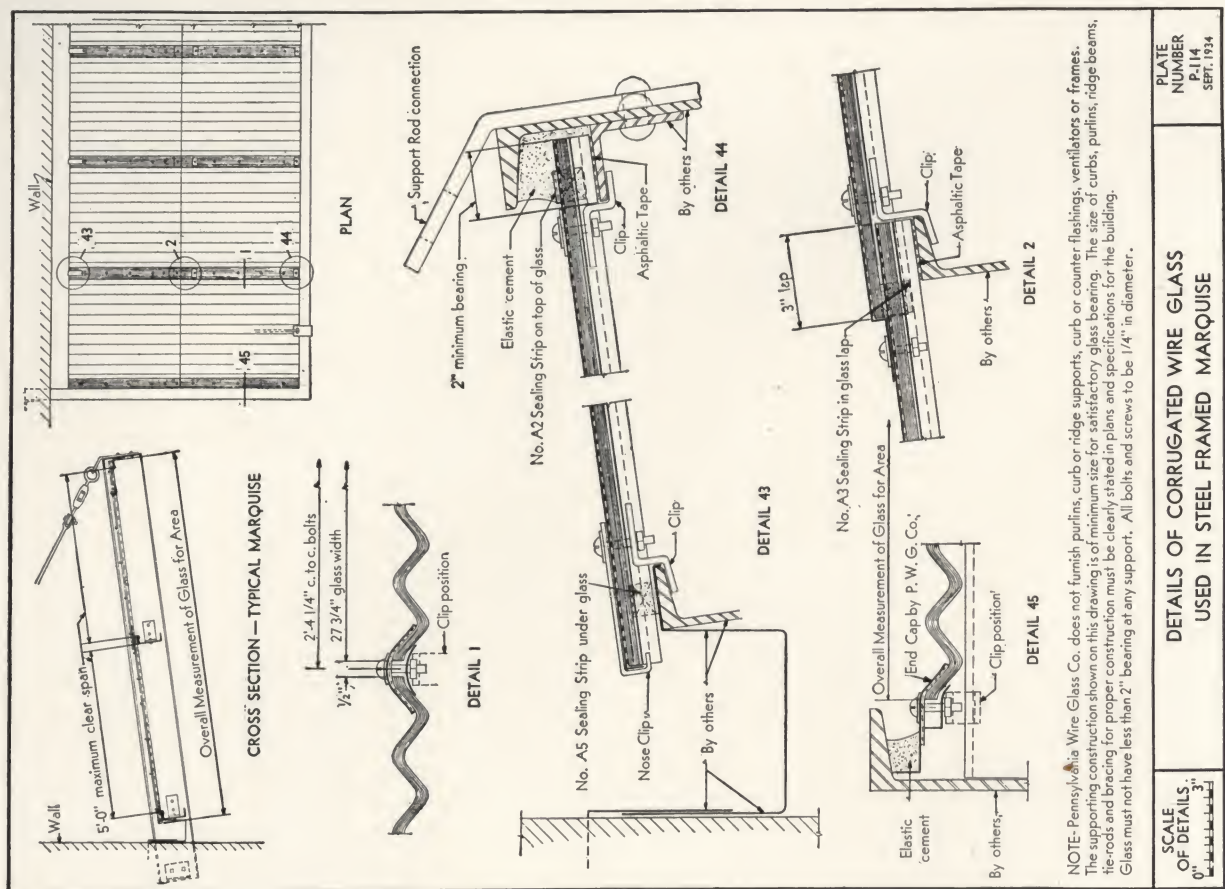


SCALE OF DETAILS 0"=1' 3"	DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS USED ON BACK SLOPES OF SAWTOOTHS	PLATE NUMBER N-112 SEP. 1974
---------------------------------	--	---------------------------------------

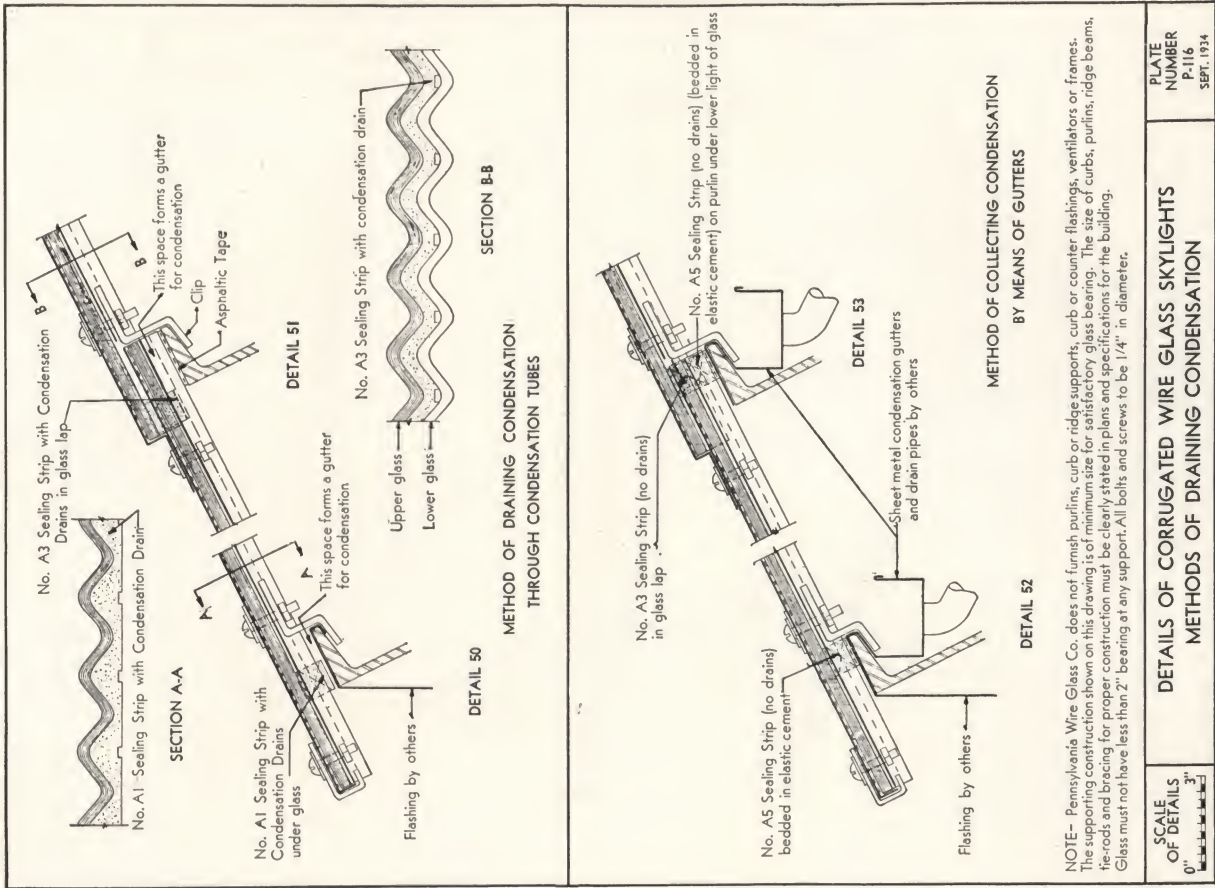


<p>SCALE OF DETAILS</p>	<p>DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS WITH WOOD SAWTOOTH FRAMING</p>	<p>PLATE NUMBER P-111 SEPT. 1934</p>
-----------------------------	--	--





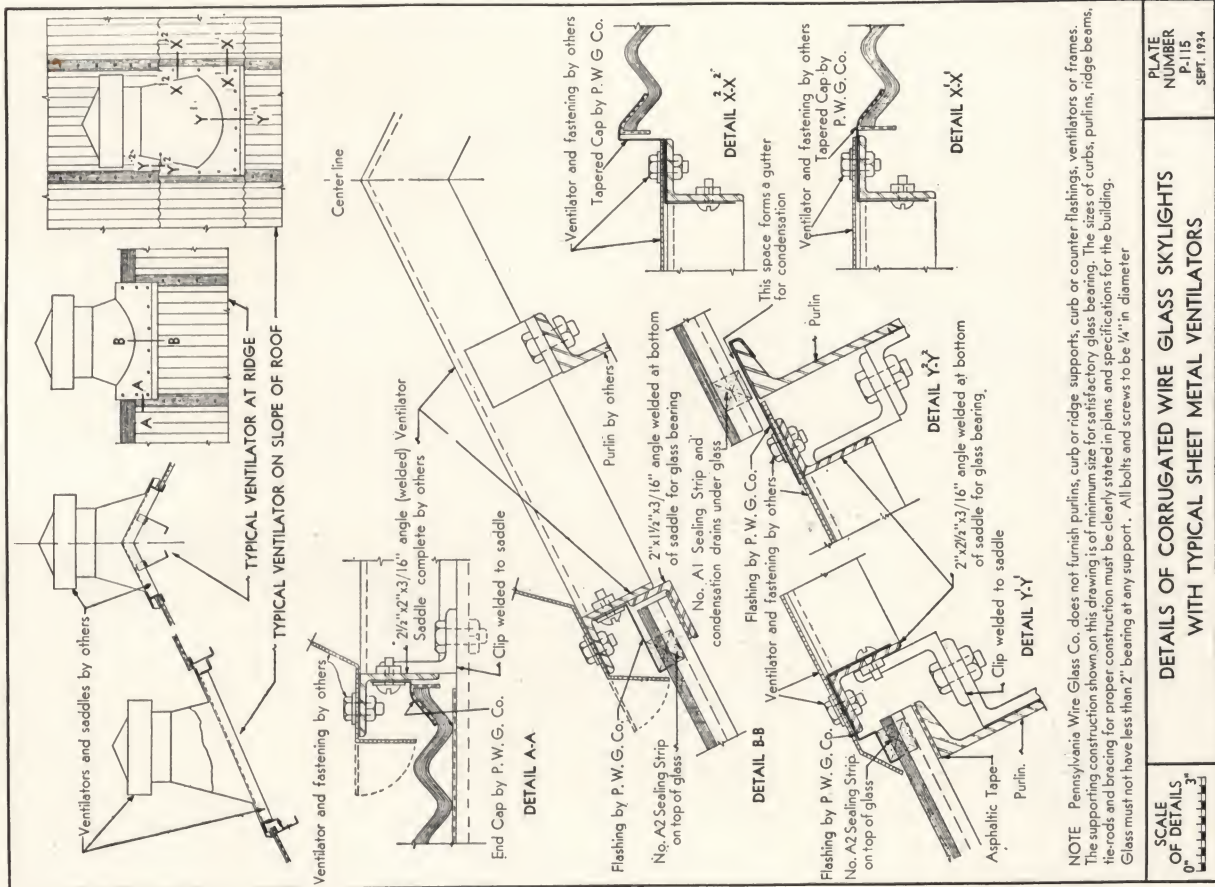




DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS  
METHODS OF DRAINING CONDENSATION

SCALE  
OF DETAILS  
0" 3"

PLATE  
NUMBER  
P-116  
SEPT. 1934

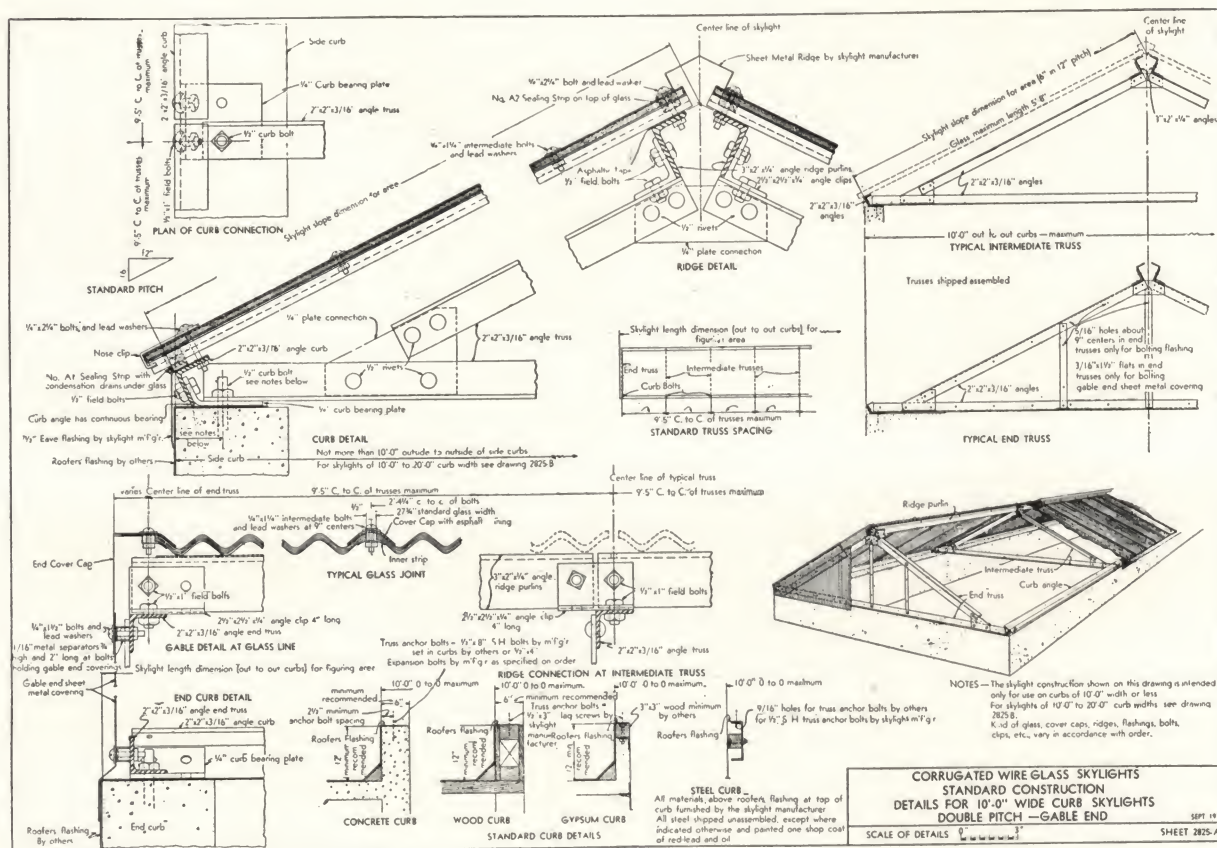
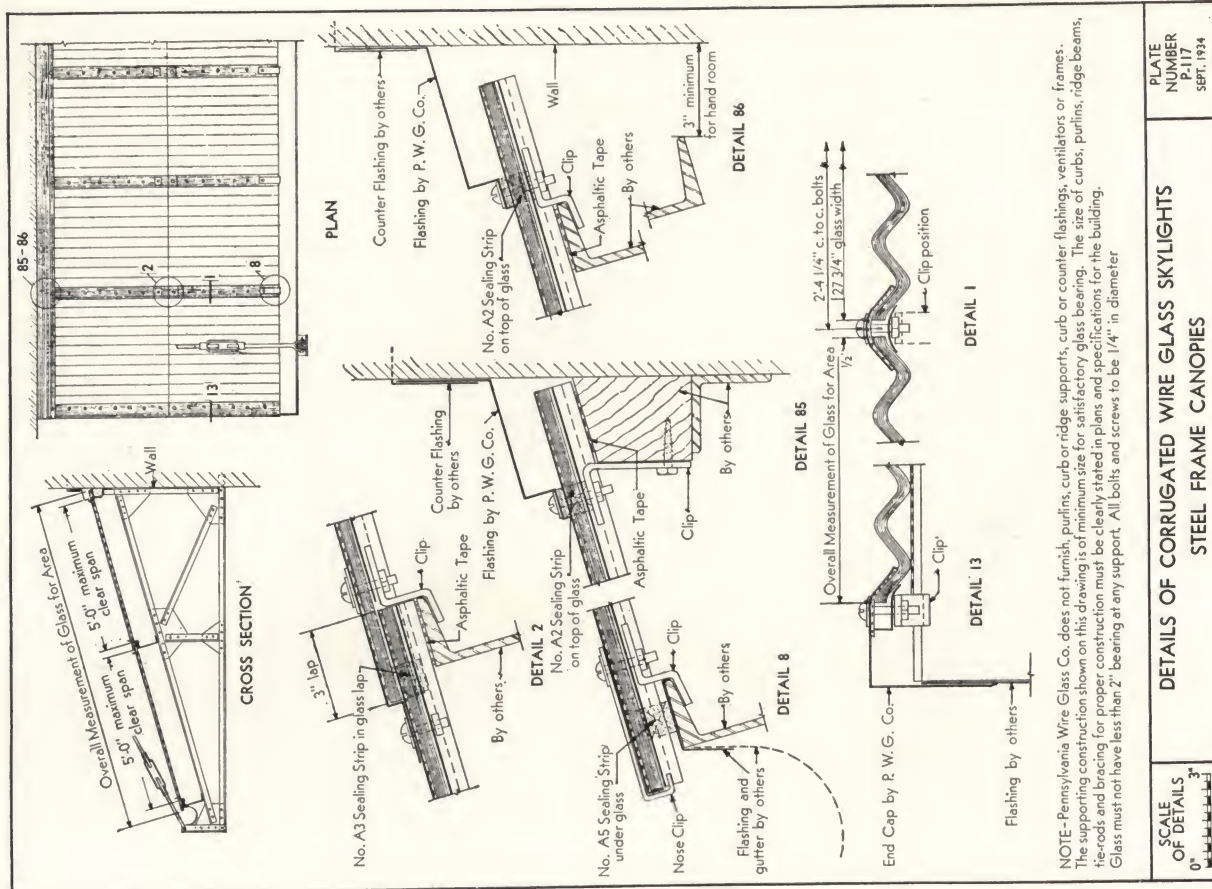


DETAILS OF CORRUGATED WIRE GLASS SKYLIGHTS  
WITH TYPICAL SHEET METAL VENTILATORS

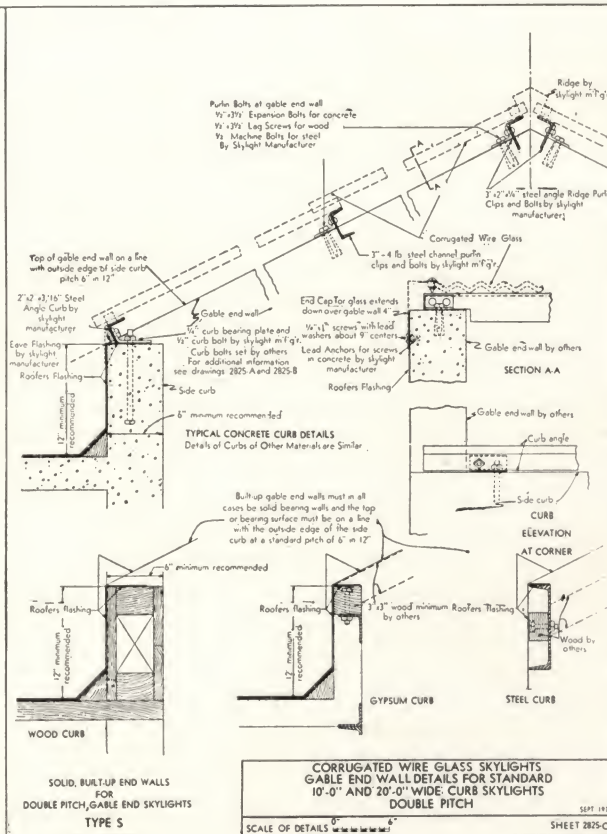
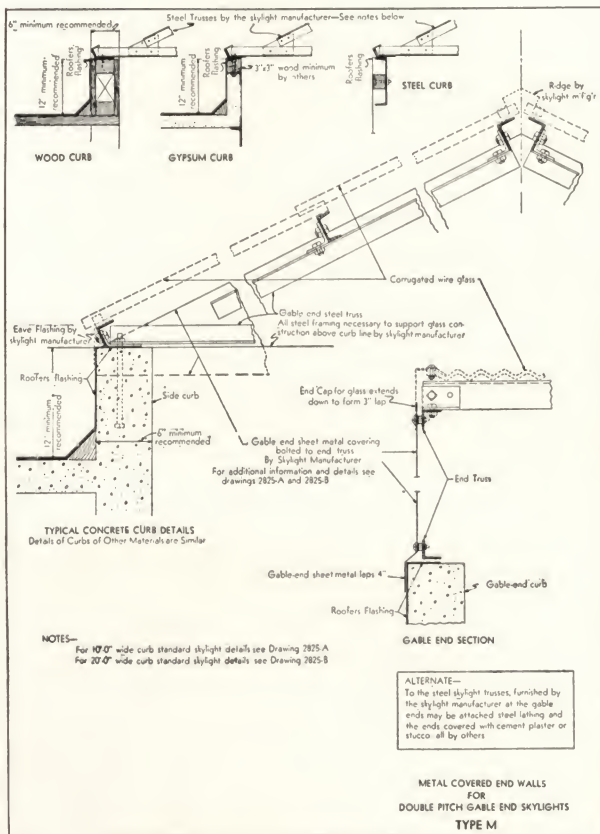
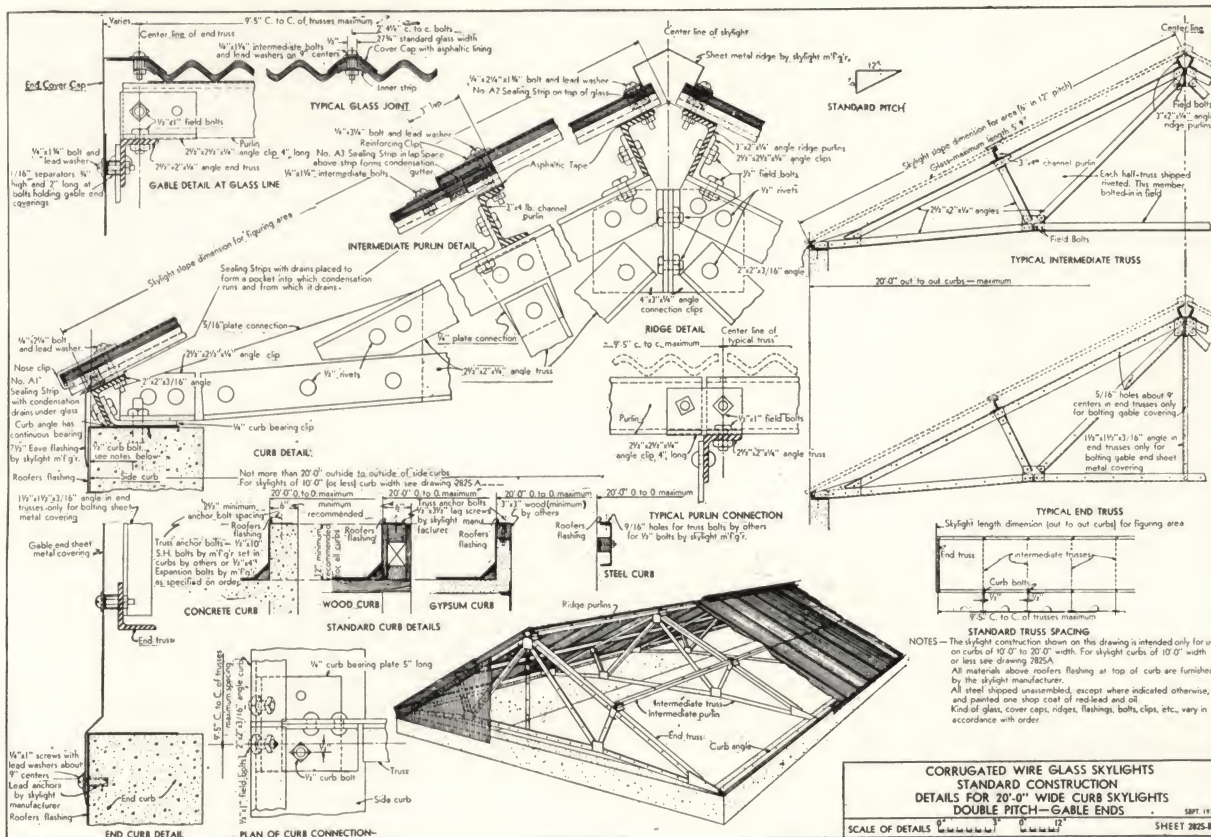
SCALE  
OF DETAILS  
0" 3"

PLATE  
NUMBER  
P-115  
SEPT. 1934





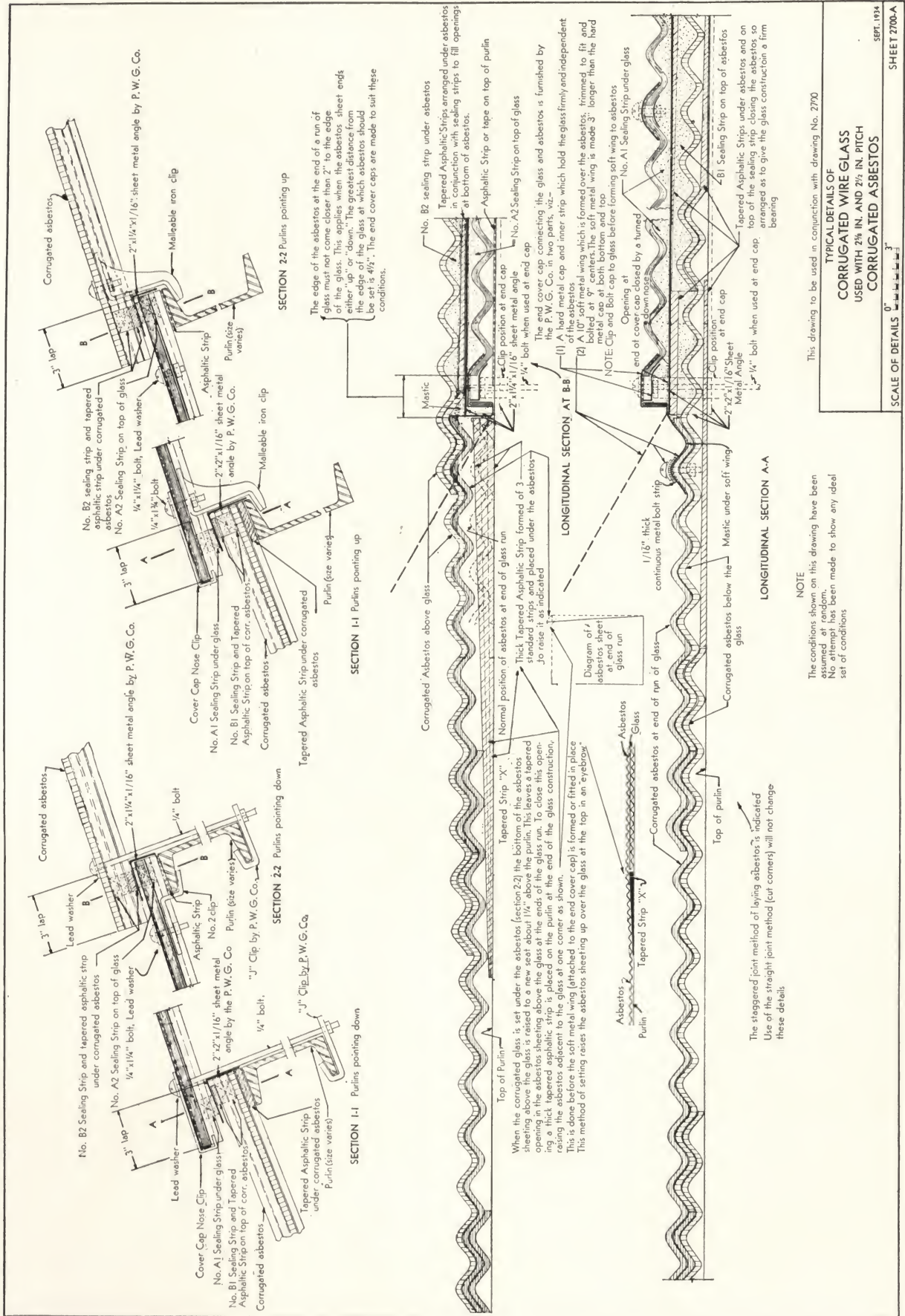




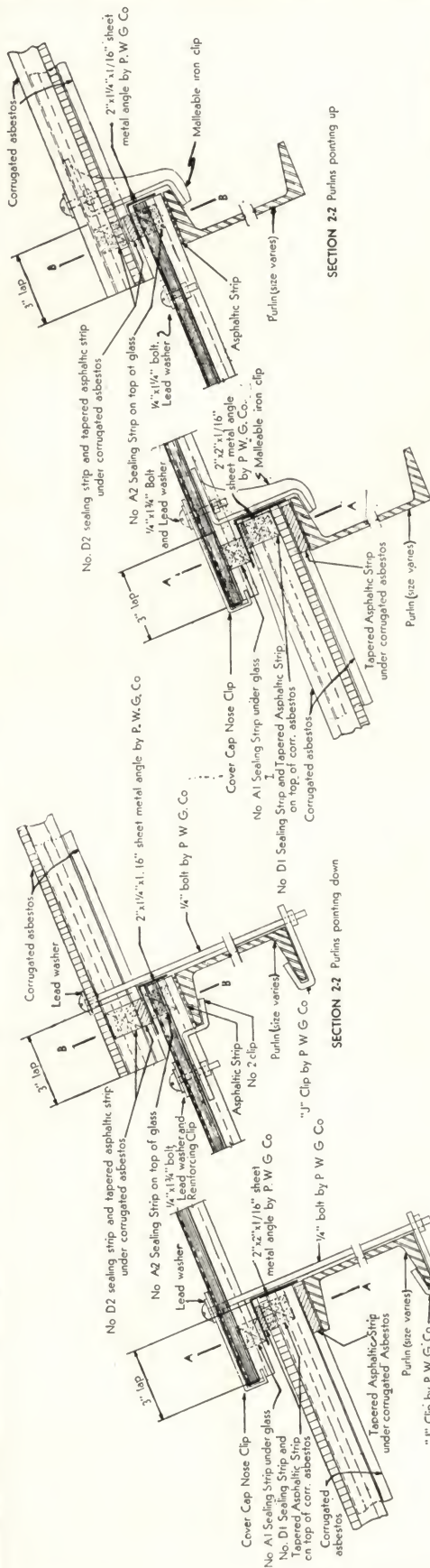








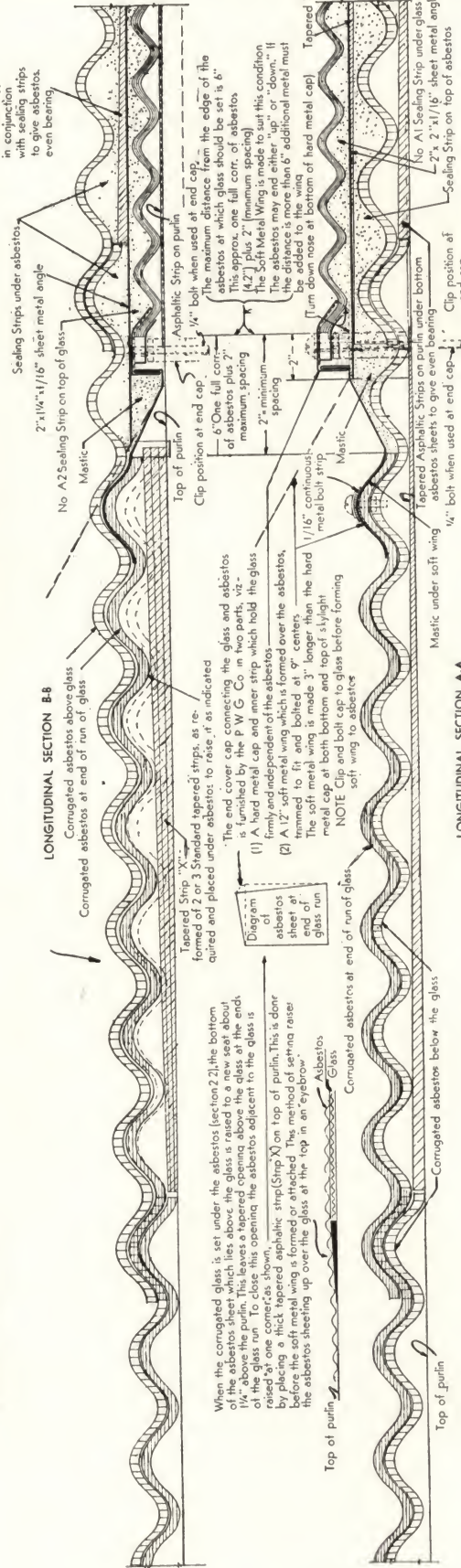




SECTION 2-2 Purins pointing up

Tapered Asphaltic Strips placed under asbestos

SECTION 1-1 Purins pointing up



LONGITUDINAL SECTION B-B

LONGITUDINAL SECTION A-A

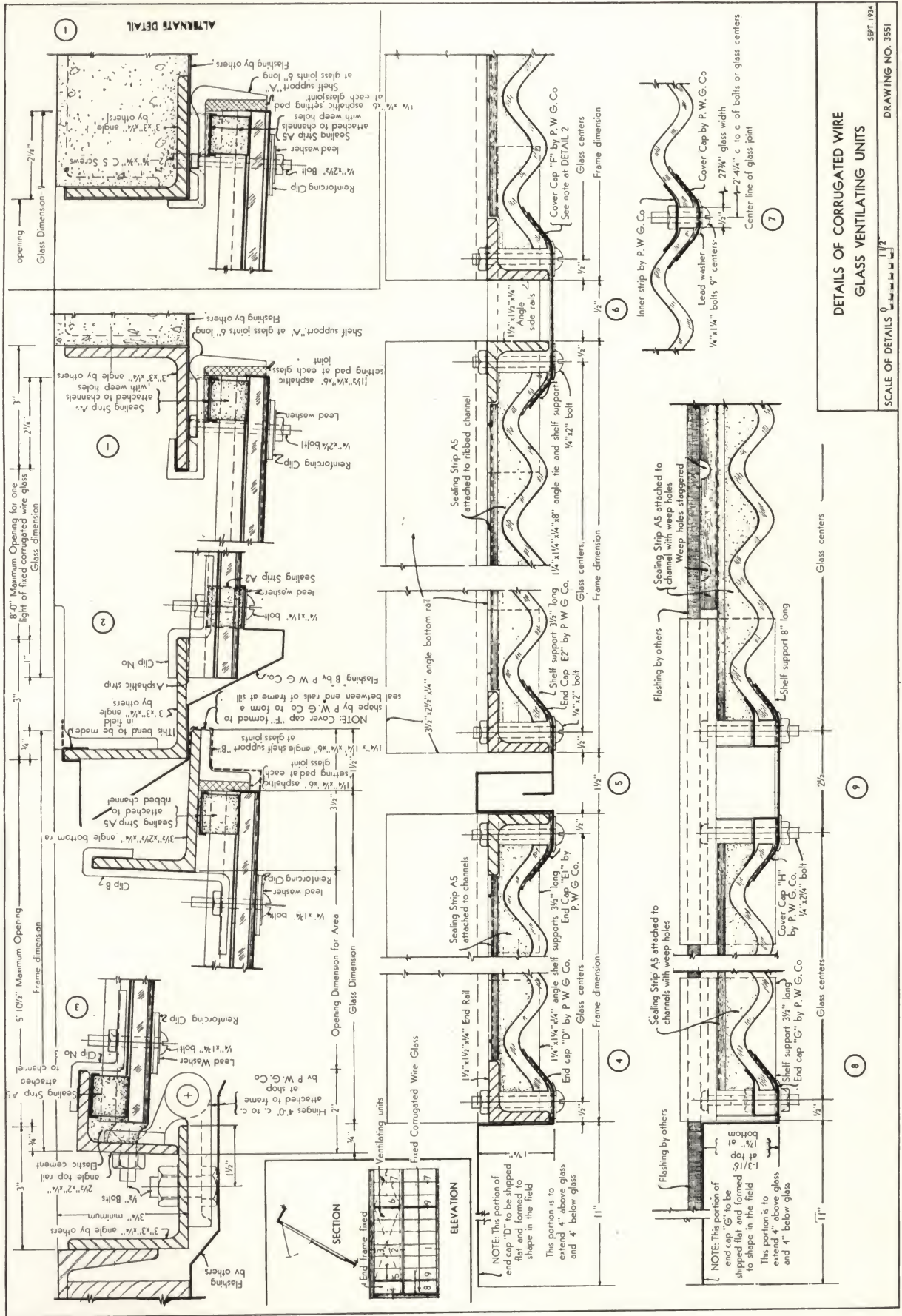
NOTE  
The conditions shown on this drawing have been assumed, at random. No attempt has been made to show any ideal set of conditions.

This drawing is to be used in conjunction with drawing No. 2700

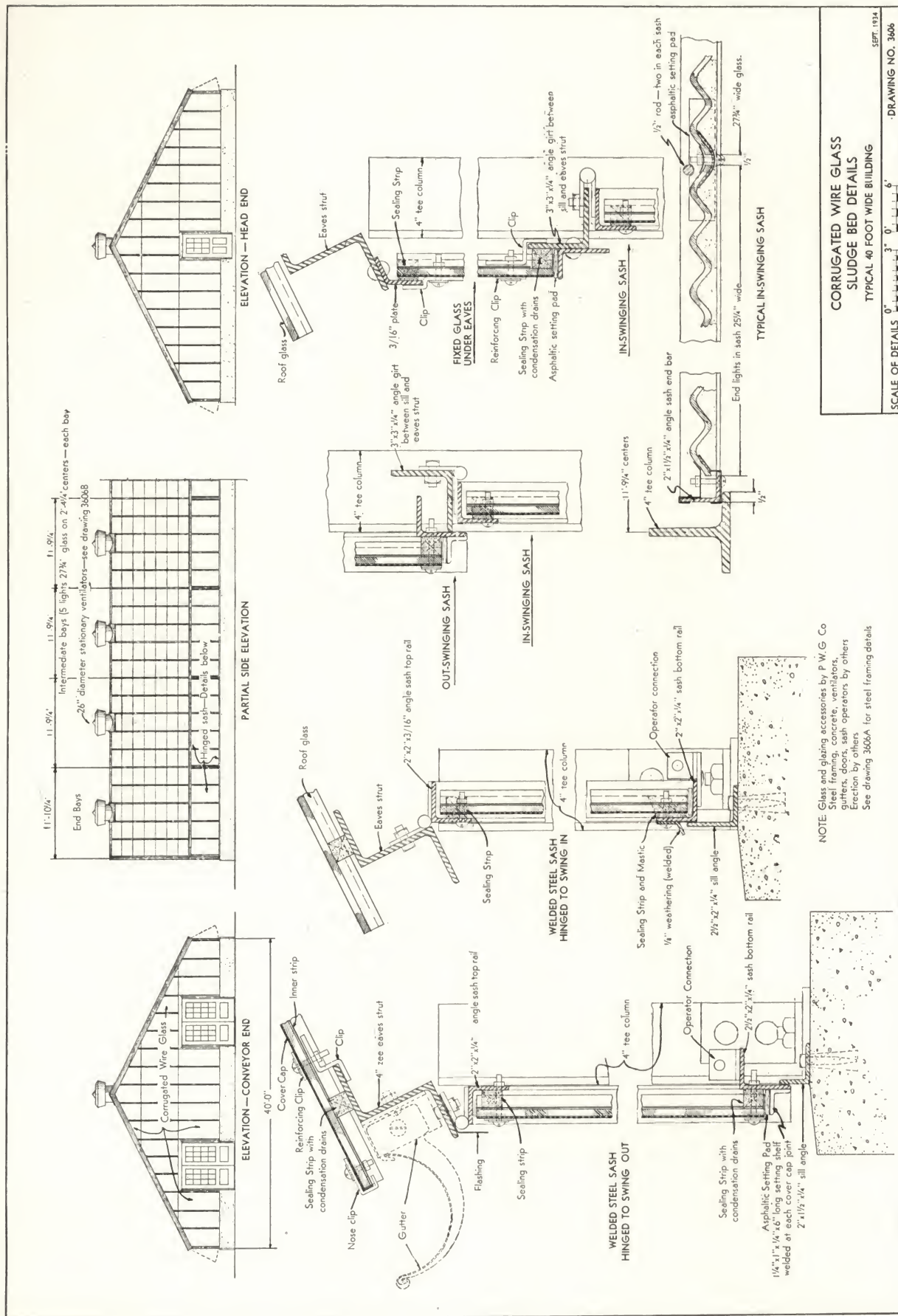
CORRUGATED WIRE GLASS  
USED WITH 4.2" PITCH  
CORRUGATED ASBESTOS

SCALE OF DETAILS 0" = 3"  
SEPT. 1934  
SHEET 2700B













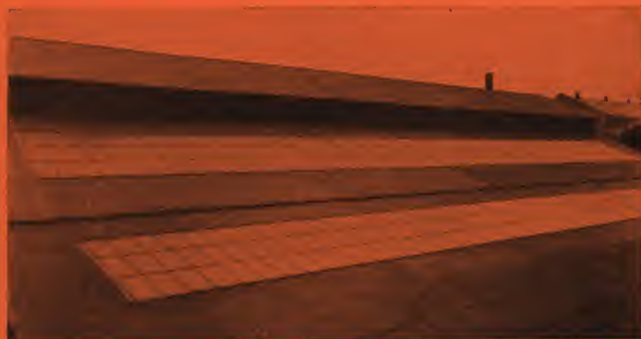




INDOOR TENNIS COURT OF MRS. H. E. TALBOT  
DAYTON, OHIO  
C. W. G. Roof



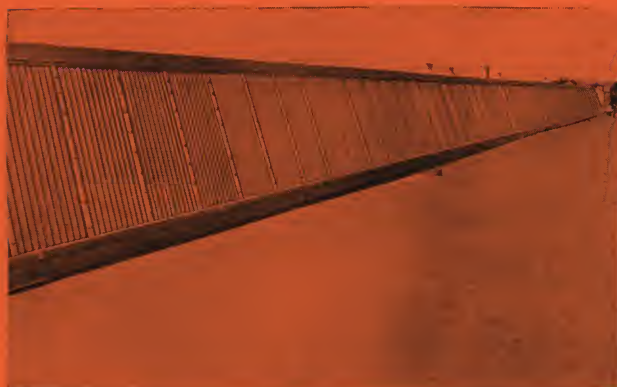
GOVERNMENT PRINTING OFFICE  
WASHINGTON, D. C.  
Street Between Buildings Roofed Over



OLIVER IRON AND STEEL CO.  
PITTSBURGH, PA.  
C. W. G. Used with Corrugated Sheet Roofing



CHESAPEAKE AND OHIO R. R. SHOPS  
RUSSELL, KY.  
68,000 sq. ft. Curb Skylights



LELAND ELECTRIC CO.  
DAYTON, OHIO  
20,000 sq. ft. Sawtooth Skylights



FORD MOTOR CO.  
LINCOLN DIVISION—DETROIT, MICH.  
C. W. G. on Back Slopes of Sawtooths

Digitized by:



ASSOCIATION  
FOR  
PRESERVATION  
TECHNOLOGY,  
INTERNATIONAL  
[www.apti.org](http://www.apti.org)

BUILDING  
TECHNOLOGY  
HERITAGE  
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

From the collection of:  
Robert Vail Cole Jr, AIA  
1962 – 2011

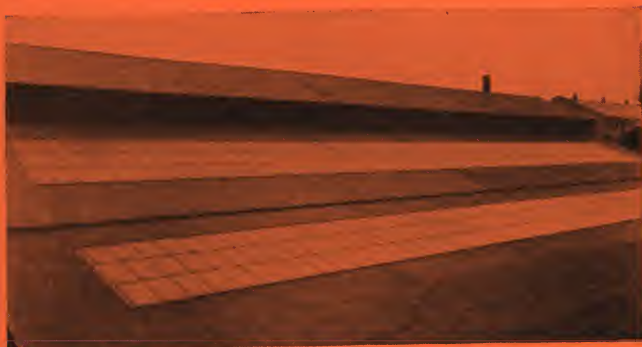




INDOOR TENNIS COURT OF MRS. H. E. TALBOT  
DAYTON, OHIO  
C. W. G. Roof



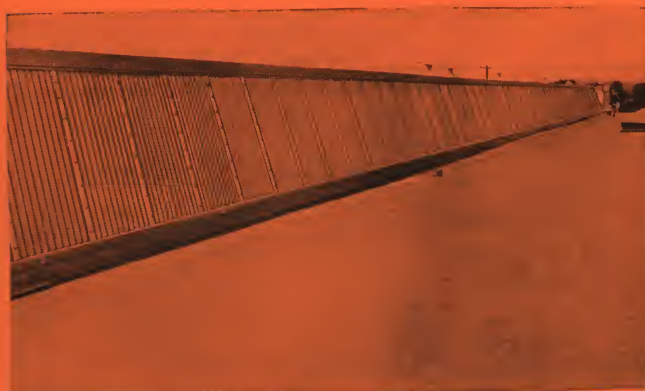
GOVERNMENT PRINTING OFFICE  
WASHINGTON, D. C.  
Street Between Buildings Roofed Over



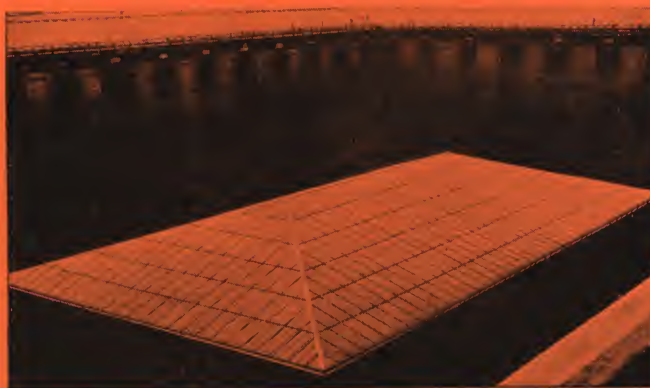
OLIVER IRON AND STEEL CO.  
PITTSBURGH, PA.  
C. W. G. Used with Corrugated Sheet Roofing



CHESAPEAKE AND OHIO R. R. SHOPS  
RUSSELL, KY.  
68,000 sq. ft. Curb Skylights



LELAND ELECTRIC CO.  
DAYTON, OHIO  
20,000 sq. ft. Sawtooth Skylights



POST OFFICE, 33rd St. and Eighth Ave.  
NEW YORK CITY  
7,100 sq. ft. Hip Skylight



FORD MOTOR CO.  
LINCOLN DIVISION—DETROIT, MICH.  
C. W. G. on Back Slopes of Sawtooths



LIBBEY-OWENS SHEET GLASS CO.  
TOLEDO, OHIO  
C. W. G. Sawtooth Skylights